

Patent Abstracts of Japan

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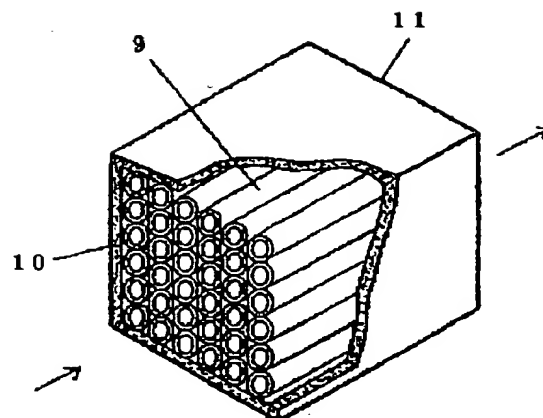
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APPLICANT : TAKUMA CO LTD;

INVENTOR : IRIE NAOKI;

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TITLE : SILENCER HAVING GAS PURIFYING
FUNCTION



ABSTRACT : PROBLEM TO BE SOLVED: To improve the performance of a clean room considering environmental preservation while streamlining air conditioning equipment of the clean room by mounting a sound-absorbing material using an ion exchange fiber in a passage of a gas.

SOLUTION: A sound absorbing material is formed into a cylindrical body 9 to be packed into a vessel 11 in a regular fashion or at random so that a gas can pass therethrough. The vessel 11 is mounted in a passage of a gas of the apparatus. Further effect is obtained by lining the internal wall of the vessel 11 with a sound absorbing material 10 beforehand. The sound absorbing materials 9 and 10 are used by forming an unwoven cloth with metsuke of 1000-2500g/m² and a thickness of 5mm or more while a mixing ratio of an ion exchanger fiber is at least 70wt.%. Moreover, the ion exchange fiber is mixed with a thermoplastic binder fiber to compose the sound absorbing materials 9 and 10 while gas contact surfaces of the sound absorbing materials 9 and 10 undergo a heating treatment to melt a part of the binder fiber thereby enhancing silencing effect and gas purifying effect.

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- (TAKU) TAKUMA KK

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XIC - F01N-001/24 ; F02M-035/14 ; F24F-007/06

XP - N1997-124393

AB - J09026177 The silencer is mounted at a gas channel (8) and made from an ion-exchange fibre which consists of a sound absorption material. The gas flowing at a cyclic duct is cleaned through the gas contamination removal function of the ion-exchange fibre that performs sound absorption.

- ADVANTAGE - Achieves compact size thus ensures high quality. Provides enough installation space since silencer and gas appts. are combined.

- (Dwg.2/5)

IW - SILENCER GAS CLEAN FUNCTION BLOW COMPRESSOR ION EXCHANGE FIBRE CONSIST OF SOUND ABSORB MATERIAL PERFORMANCE GAS CONTAMINATE REMOVE CYCLIC DUCT

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NC - 001

OPD - 1995-07-13

ORD - 1997-01-28

PAW - (KYUN) NEC KYUSHU LTD

- (TAKU) TAKUMA KK

TI - Silencer with gas cleaning function for e.g. blower, compressor - has ion-exchange fibre which consists of sound absorption material, that performs gas contamination removal at cyclic duct